REMARKS

Claims 13-17 and 20 are pending in this present application. In the February 20, 2009 Final Office Action, the Examiner:

1. Rejected claims 13 and 14 under 35 U.S.C §103(a) as being unpatentable over Pieronne et al. (U.S. Patent No. 4,662,355) in view of Leschinsky et al. (U.S. Patent No. 5,439,448) and further in view of Rawles et al. (U.S. Patent No. 6,890,316);
2. Rejected claims 15 and 20 under 35 U.S.C. §103(a) as being unpatentable over (Pieronne et al. in view of Leschinsky et al. in view of Rawles hereinafter "Modified Pieronne") and further in view of Aboul-Hosn et al. (U.S. Patent No. 6,935,344).
3. Rejected claim 16 under 35 U.S.C. §103(a) as being unpatentable over (Pieronne et al. in view of Leschinsky et al. in view of Rawles hereinafter "Modified Pieronne") as applied to claim 13 above, and further in view of Runge (U.S. Patent No. 5,743,845);
4. Rejected claim 17 under 35 U.S.C. §103(a) as being unpatentable over Pieronne et al. in view of Leschinsky et al. in view of Rawles and Runge as applied to claim 16 above, and further in view of Aboul-Hosn et al.

Claims 13-17 and 20 presently stand rejected. Applicants traverse. Reconsideration of the pending claims is respectfully requested.

1. INDEPENDENT CLAIM 13 IS NOT OBVIOUS OVER PIERONNE IN VIEW OF LESCHINSKY, AND FURTHER IN VIEW OF RAWLES

The Examiner rejected Claims 13 and 14 under 35 U.S.C §103(a) as being obvious over Pieronne et al. (U.S. Patent No. 4,662,355) in view of Leschinsky et al. (U.S. Patent No. 5,439,448) and further in view of Rawles et al. (U.S. Patent No. 6,890,316). The Examiner's rejections are repeated from the June 6, 2008 Non-Final Office Action. On November 6, 2008, Applicants responded to the pending rejections. Applicants respectfully submit that the Examiner's response to Applicants' arguments continues to read non-existent teachings into the asserted references and ignores the plain

language of the claim.

1. ***Applicants argued that Pieronne does not teach "priming the shunt." The Examiner argued that a) "air purges by definition are used to remove air from closed systems," and b) "Pieronne states that products are injected through inputs (5, 5a, 12, 12a) which are located by air purges (4, 4a, 13, 13a) (Col. 2, line 60 to Col. 3, line 11)."*** The Examiner's response does not address Applicants' arguments. Applicants respectfully submit that the Examiner's response is based on a mischaracterization of Applicants' arguments. Applicant argued that Pieronne "does not teach priming the shunt. ... Pieronne teaches using air purges ***in conjunction*** with input ports for injecting products such as heparine and protamine into the blood circuit." That is, Applicants did not argue that the Pieronne "air purges" do not remove air. Applicants argued that Pieronne teaches using the air purges and input ports to remove air bubbles by injecting products such as heparine or protamine into the blood circuit. *See* Pieronne 2:47-3:11. Pieronne does not teach "priming the shunt with the patient's own blood by allowing the blood to fill the shunt to remove air through open vents" as recited in independent claim 13.

2. ***Applicants argued that Rawles does not teach "priming ... the shunt with the patient's own blood to remove air." The Examiner responded by stating that the "Examiner acknowledges that the specific embodiment first uses saline then blood to prime the system. But, Rawles still teaches a method that uses the patients blood (sic) to prime the system. Further, Rawles discloses that the system can be primed with the patients (sic) own blood without the use of saline or donor blood (Col. 9, II. 5-14)."*** Applicants respectfully submit that the Examiner is distorting the teaching of Rawles to fabricate a teaching of "priming the shunt with the patient's own blood to remove air." Rawles states:

> In the case where the perfusionist desires to use the patient's own blood to prime the blood handling system comprising the tubing set and integrated blood pump/oxygenator of the aforementioned patent application, the blood handling system 40 is still initially primed with saline until all air bubbles are removed from all lines and the integrated blood pump/oxygenator 41.

Rawles, 9:15-21. Rawles does not teach priming the blood handling system "with the patient's own blood *by allowing the blood to fill the shunt to remove air through open vents*" as recited in claim 13. (emphasis added). Rawles teaches that the blood handling system is initially primed with saline "until all air bubbles are removed from all lines and the integrated blood pump/oxygenator 41." Rawles 9:20-21. Rawles also teaches that "only approximately 400 to 500 ml of priming fluid ***are required.***" Rawles 9:7-8. (emphasis added). The saline, not the blood, removes "all air bubbles." The blood displaces the saline and directs the saline to a bag once the blood pump is coupled to the cannulae. *See* Rawles 9:22-27.

3. ***The Examiner argued that "the applicant wrote the claim in an open ended format (comprising) and does not preclude the use of saline along with the patients (sic) own blood to prime the system."*** Applicants respectfully submit that the Examiner's argument ignores the plain language of independent claim 13, which states: "priming the shunt with the patient's own blood by allowing the blood to fill the shunt to remove air through open vents." As noted above, Rawles does not teach "priming the shunt with the patient's own blood by allowing the blood to fill the shunt to remove air through open vents."

4. ***The Examiner ignored Applicants' argument that Pieronne fails to teach "priming the shunt."*** Pieronne does not teach priming the shunt. Pieronne teaches "[m]eans connected to the bubble detector 6 of the left system circuit for stopping the pump 7 should bubbles be detected." *See* Pieronne, 3:12-14. That is: Pieronne teaches stopping the pump if bubbles are detected. Pieronne teaches using air purges in conjunction with input ports for injecting products such as heparine and protamine into the blood circuit. Pieronne does not teach any steps for attaching the blood circuit to the patient nor any steps for priming the blood circuit.

Neither Pieronne nor Rawles teaches "priming the shunt with the patient's own blood to remove air." Claim 13 is allowable. The Examiner's rejections should be withdrawn.

II. INDEPENDENT CLAIM 20 IS NOT OBVIOUS OVER PIERONNE IN VIEW OF LESCHINSKY, AND IN VIEW OF RAWLES AND FURTHER IN VIEW OF ABOUL-HOSN

The Examiner rejected Claims 15 and 20 under 35 U.S.C. 103(a) as being obvious over Pieronne et al. (U.S. Patent No. 4,662,355) in view of Leschinsky et al. (U.S. Patent No. 5,439,448) in view of Rawles et al. (U.S. Patent No. 6,890,316) hereinafter "Modified Pieronne") and further in view of Aboul-Hosn et al. (U.S. Patent No. 6,935,344). In the Applicants' response to the Non-Final Office Action, Applicants stated that independent Claim 20 is allowable for the same reasons as claim 13 above. In the February 20, 2009 Final Office Action, the Examiner failed to provide any response to the Applicants' argument specific to claim independent claim 20. The Examiner's rejections should be withdrawn.

CONCLUSION

Favorable consideration is respectfully requested in view of the foregoing amendments and remarks.

Respectfully submitted,

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